

CLAIMS:

1. (currently cancelled)

2. (currently amended) A frame transmission apparatus comprising;
a frame transmitting means for transmitting ~~to an apparatus of a communications partner~~ frames and a request ~~command~~ for frame configuration modification to an apparatus of a communication partner; and,

a frame receiving means for receiving frames from the apparatus of the communication[[s]] partner, the frame receiving means ~~being for~~, when the request ~~command~~ for frame configuration modification is transmitted to the apparatus of the communication[[s]] partner, ~~continuing to receive~~ receiving frames with whose configuration has not been modified, before the modification and at the same time while waiting for frame with whose configuration after the modification has been modified, wherein

in a case that the frame configuration modification is a modification for adding a header field, the modification is carried out without waiting for a request for frame configuration modification, and frames whose configuration has been modified are transmitted.

3-5. (currently cancelled)

6. (new) A method for modifying a frame configuration, comprising the steps of:
receiving by a receiver frames of data in synchronization sent from a sender, the frames having a frame configuration;
requesting the sender by the receiver to modify the frame configuration of the data being received by the receiver; and
upon a reception of a frame having a frame configuration which is modified as requested by the receiver, automatically reconfiguring the receiver according the modified frame configuration so as to receive frames of the modified frame configuration in synchronization.

7. (new) A method according to claim 6, wherein the modification to the frame configuration comprises an omission of frame length information from a header included in the frames.

8. (new) A method according to claim 7, further comprising automatically restoring the reconfigured receiver upon a reception of a frame in which the omitted information is restored in the header unilaterally by the sender.

9. (new) A method according to claim 6, wherein the modification to the frame configuration comprises a modification to a data CRC field in a header included in the frames.

10. (new) A method according to claim 6, further comprising repeating the request for modification to the frame configuration if a frame having the modified frame configuration is not received within a period of time.

11. (new) A method according to claim 6, further comprising performing an error handling at the receiver if the receiver receives a frame having a frame configuration with an unintended modification made thereon.

12. (new) A frame transmission apparatus, comprising:

a receiver unit that receives frames of data from a sender, the frames having a frame configuration;

a frame segmentation unit that establishes, according to the frame configuration, frame synchronization on the frames being received; and

a receipt control unit that monitors the frame segmentation unit and, a period of time after the frame segmentation unit establishes the frame synchronization, sends the sender a request to modify the frame configuration of the frames being received by the receiver unit, wherein

upon a reception, by the receiver unit, of a frame having a frame configuration which is modified as requested by the receipt control unit, the frame segmentation unit is automatically reconfigured, according the modified frame configuration, so as to receive frames of the modified frame configuration in synchronization.

13. (new) An apparatus according to claim 12, wherein the modification to the frame configuration comprises an omission of frame length information from a header included in the frames.
14. (new) An apparatus according to claim 13, wherein the reconfigured frame segmentation unit is automatically restored upon a reception of a frame in which the omitted information is restored in the header unilaterally by the sender.
15. (new) An apparatus according to claim 12, wherein the modification to the frame configuration comprises a modification to a data CRC field in a header included in the frames.
16. (new) An apparatus according to claim 12, wherein the receipt control unit repeats sending the request to the sender if a frame having the modified frame configuration is not received within a period of time.
17. (new) An apparatus according to claim 12, wherein the frame segmentation unit performs an error handling when it receives a frame having a frame configuration with an unintended modification made thereon.